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THE EFFECT OF FINANCIAL LEVERAGE AND CASH FLOW ON THE FINANCIAL DISTRESS OF INFRASTRUCTURE SECTOR COMPANIES

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ABSTRACT

This study aims to determine the effect of Financial Leverage and Cash Flow on Financial Distress in infrastructure sector companies on the IDX. This type of research is quantitative research and uses secondary data. The sampling technique used the purposive sampling technique, with a total population of 31 companies obtained as a sample of 155. The analytical method used in this study was multiple linear analysis.The results of the analysis that have been carried out show that financial leverage has an influence on financial distress with a count of -7.159 with a significance value of <0.05 so the first hypothesis is accepted. Cash flow has no effect on financial distress with a count of 1.663 and a significance value of >0.05 so the second hypothesis is rejected. Simultaneously, financial leverage and cash flow affect financial distress with an F test value of 29.185. Based on the R2 test that has been carried out, the magnitude of the distribution that affects financial distress is 35.1%.So this study shows that financial leverage harms financial distress. Cash flow does not affect financial distress. Financial leverage and cash flow can simultaneously affect financial distress,

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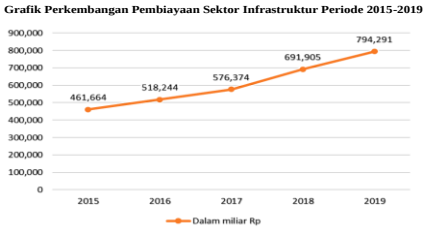
1. INTRODUCTION

In achieving the company's goals, the primary thing that the company must meet is cash flow to finance the company's operational activities. With sufficient cash, management can carry out an agenda of activities that have been prepared to achieve company goals. The source of funds obtained by the company can come from business activities, loans, the sale of shares, or transactions in the capital market. The funds obtained to become the company's capital to fulfill its obligations to other parties such as the provision of raw materials, payment of wages, additional working capital including investment, and fulfillment of obligations to stakeholders in the form of dividends.

The capital market is an alternative used by companies that have *gone public* to obtain additional funds other than through loans from financing institutions. According to kompas.com in September 2019, the market capitalization value in the infrastructure sector reached Rp 865 Trillion, or around 12% of the total market capitalization in the Ind ex-Composite Stock Price (JCI) [1].

During 2015 – 2019, infrastructure development became a priority in the 2015–2019 National Medium-Term Development Plan (RPJMN) which was carried out to carry out economic equality in Indonesia. (Financial Services Authority Annual Report 2019, 2019)



Sumber: Laporan Tahunan OJK 2018 dan 2019 (www.ojk.go.id)

Based on the graph of financing developments in the infrastructure sector, during the 2015-2019 period there was an increase yearly in the amount of financing. The use of funds from large enough creditors is generally taken to meet the needs of company activities that require large enough funds such as investment or business expansion or working capital expenditures.

Financial distress is when a company cannot fulfill its obligations to creditors with its operating cash. By detecting it early, the company can determine corrective steps to overcome its financial condition so that it does not get worse and hingga towards bankruptcy[2]. The biggest problem of bankruptcy is the lack of adequacy of the funds held to pay the short-term obligations of the company. [3]

Financial distress occurred before bankruptcy which was marked by a decrease in the company's financial condition[4]. Financial distress can lead to bankruptcy or liquidation, before experiencing bankruptcy the company experiences a decline in financial condition (Dwijayanti 2010).

The *Z-score* equation is an equation that uses the financial statement component in its calculation component. In his research, Edward Altman put forward this model, which became known as the Altman Z-score (Darsono and Ashari n.d.) Based on research conducted by Altman, there are 3 (three) zones in the *cut-off assessment of financial distress: the safe zone*, *gray zone*, and *distress zone*. The gray zone value is if the Z obtained is between 1.81 to 2.99 [6].

Financial leverage is financing obtained from financial activities. *Leverage* can determine the proportion of debt in the capital structure and the company's ability to repay the debt. Thus, the results of its analysis can be seen as early detection of the possibility of bankruptcy (Yuanita 2010). The *debt to equity ratio* (DER) is the number of capital funds required to fulfill obligations by shareholders.

Operating cash flow can be used as one indicator for assessing the enterprise's financial performance. Operating cash flow shows the company's ability to generate cash from its operational activities for operational activities to investment activities that require funding (Dwi Nurhayati, Riana R Dewi 2021). Low operating cash flow (AKO) can cause the company to use debt for its operations and current liabilities.

2. METHOD

In this study, the method used is a quantitative approach by looking for a set of data in the form of numbers. The data obtained is secondary data from the publication of financial statements by sample companies listed on the Indonesia Stock Exchange from 2015 – 2019.

3. RESULT AND DISCUSSION

This study aims to test the influence of independent variables that can affect financial distress in companies listed in the infrastructure sector on the IDX for the 2015-2019 period.

Sample processing is carried out using transformation and outlier methods. The transformation uses Lg10 (logs) because there is a large amount of data worth 0 (zero). After the transformation, 44 samples could not be continued for research, so *an outlier* was carried out on the sample again.

Table 2. Descriptive Statistical Analysis

Statistik Deskriptif

	N	*Min*	*Max*	*Mean*	Std. Deviasi
Lg10_DER	111	-0,95	1,13	0,1092	0,36867
Lg10_AKO	111	-2,65	0,40	-0,5606	0,61861
Lg10_FD	111	-0,33	1,55	0,3070	0,31119
Valid N (listwise)	111				

Sumber: data diolah oleh peniliti (*output* SPSS)

Figure 2: Descriptive Statistical Processing Results

Based on the table, the *debt to equity ratio* has a sample with the lowest value of -0.95, the highest value of 1.13, and an average value of 0.1092. The operating cash flow has a sample with the lowest value of -2.65 and the highest value of operating cash flow is 0.40 with an average value of -0.5606. Meanwhile,

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the independent financial *distress* variable has the lowest value of -0.33 and the highest value of 1.55 with an average value of 0.3070.

Standard deviation is the expected value of deviation fluctuations that may occur at the average value, the standard deviation in *financial distress* is 0.31119. The independent variable is 0.36867 for *the debt to equity ratio* and 0.61861 for operating cash flow.

Table 3. Multiple Linear Regression Analysis

Analisis Regresi Linear Berganda

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0,395	0,033		12,074	0,000
	Lg10_DER	-0,473	0,066	-0,560	-7,159	0,000
	Lg10_AKO	0,065	0,039	0,130	1,663	0,099

Sumber: data diolah oleh peneliti (*output* SPSS)

Figure 7: Statistical Processing Results of Multiple Linear Regression Analysis

The double linear regression equation is deciphered with Y = α + b1 x1+b2 x2. Based on the data in table 4.11, the regression equation Lg10_FD = 0.395 + (-0.473)x1 + 0.065x2 with the description of the regression equation as follows.

1. The constant value (α) of 0.395 states that if financial leverage and cash flow have a value of 0 (zero), the value of financial distress is 0.395.
2. The leverage variable regression coefficient is -0.473 stating that any increase in financial leverage will affect the decrease in the value of financial distress by 0.473.
3. The variable regression coefficient of cash flow is 0.065 stating that any cash flow increase will affect the value of financial distress by 0.065.

Detecoefficient of termination

Table 4. **Statistical Processing Results of Coefficient of Determination**

Uji Koefisien Determinasi

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.592[a]	0,351	0,339	0,25304

Sumber: data diolah oleh peneliti (*output* SPSS)

The table above shows the value of R square or R^2 of 0.351 > R=0. This shows a significant influence on the independent variable, namely financial leverage, and cash flow on the dependent variable, namely financial distress of 35.1%.

Hypothesis Test

Individual Testing (T-Test)

table 5: Statistical Processing Results of T-Test (Hypothesis Test)

Tabel Uji T

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0,395	0,033		12,074	0,000
	Lg10_DER	-0,473	0,066	-0,560	-7,159	0,000
	Lg10_AKO	0,065	0,039	0,130	1,663	0,099

Sumber: data diolah oleh peneliti (*output* SPSS)

The T-test is performed to partially determine the degree of significance of each variable to the independent variable. Based on table 4.13 shows that the value of the study's t-test is -7.159 for the financial leverage variable and 1.663 for the cash flow variable. The financial leverage t-test of 7.159 > t table 1.65909 (n-k-1=108) showed that there was a negative and significant influence on financial distress. Meanwhile, cash flow with a t-test result of 1.663 < 1.98217 (n-k-1 = 108) partially did not significantly affect *financial distress*.

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Model Feasibility Testing (F Test)

The F test is used to determine the influence between independent variables on dependent variables simultaneously or together. Based on the Test F table, the calculated F value is 29.185 > table F is 3.08. From this statement, it is known that there is a significant influence between *financial leverage* and cash flow as an independent variable against *financial distress* as a dependent variable.

Tabel Uji F

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3,737	2	1,869	29,185	.000[b]
	Residual	6,915	108	0,064		
	Total	10,652	110			

a. *Dependent Variable*: Lg10_FD
b. *Predictors*: (*Constant*), Lg10_AKO, Lg10_DER
Sumber: data diolah oleh peneliti (*output* SPSS)

Figure 10: F Test Statistical Processing Results (Hypothesis Test)

Financial Leverage* to *Financial Distress

Based on a partial test conducted on *financial leverage* with *a debt to equity ratio* (DER) ratio, showed significant results. With a significance value of 0.000, this value is smaller than the research significance value of 0.05 (5%).

This shows that *the level of the financial leverage* ratio will have a negative and significant effect on the condition of *financial distress* in a company. So that the research hypothesis that *states financial leverage* can have a significant adverse effect on *financial distress is* accepted.

This result is supported by research conducted by [8] which examines the effect of *financial leverage* as an independent variable and shows significant results on *financial distress*.

Based on signal theory, financial leverage can be used as one of the indicators that give negative or positive signals to the company's condition. The high value of the financial leverage ratio indicates that the funding from third parties is relatively high. The high ratio *of financial leverage* in infrastructure sector companies is due to the need for considerable costs in carrying out their business activities in working on infrastructure and other routine operational activities.

Cash Flow to Financial Distress

Partially using the cash flow t-test does not affect *financial distress*. The value of cash flow significance with an operating cash flow ratio (AKO) of 0.099 is greater than the statistical significance value of 0.05 (5%). This shows that cash flow fluctuations do not significantly affect the company's *financial distress*. Thus, the research hypothesis that operating cash flow has a significant positive effect on *financial distress is* rejected.

This is in line with research conducted with[4] which examines cash flow as an independent variable of *financial distress*. The results of his research showed that there was no significant influence between cash flow and *financial distress*.

On average, the cash flow value of infrastructure companies has not reached a good enough value. The average value in the sample was -0.5606 with the lowest value of -2.65 and the highest at 0.40.

Financial Leverage* and Cash Flow to *Financial Distress

The F-test results between independent variable *financial leverage* with *debt to equity ratio* and cash flow with operating cash flow to *financial distress* showed significant results. The F test value obtained is 29.185 > 3.08, so it can be concluded simultaneously that the two independent variables can significantly affect the dependent variable, namely *financial distress*. With an R-value of 0.351 or equivalent to 35.1% > of R=0. So that the R^2 value obtained can be distributed to the dependent variable, namely financial distress. While the remaining 64.9% was influenced by other variables that were not included in this study.

This study's results align with the research conducted by [8]. In his research, there are financial leverage and cash flow are used as independent variables that influence financial distress

4. CONCLUSION

The following conclusions were obtained based on the results of the analysis that has been carried out Financial leverage using the debt to equity ratio (DER) ratio negatively influences financial distress. , Cash flow using the operating cash flow ratio does not significantly affect financial distress., Simultaneously, financial leverage and cash flow can significantly affect financial risk.

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